GOAL 1. Improve Water Quality through the Reduction of Sediment and Nutrient Delivery to Surface Waters within Milwaukee County.

| OBJECTIVES (Listed in order of ranked priority) | ACTIONS | WHO (Lead agency listed first) | PROGRESS TRACKING* | ESTIMATED COUNTY STAFF NEEDS | ESTIMATED OTHER COSTS |
|---|---|---|--|---------------------------------------|--|
| Encourage public awareness of water quality problems and stormwater issues. Ensure that County staff is adequately trained to develop strategies or implement technologies to solve water quality problems. | Continue to work with local agencies and organizations to hold educational workshops and conferences designed to train consultants, inspectors, municipalities, developers, and County personnel about the latest technologies and regulatory codes relating to stormwater and water quality issues. | UWEX, DNR, DTPW-ES | Assist in hosting at least one workshop per year regarding stormwater or water quality issues. | \$10,000 annually | \$2,000 annually outreach costs |
| Implement NR 216 Stormwater Requirements. | Implement NR 216 Stormwater Requirements. As part of the Milwaukee County Stormwater Process, monitor the levels of chloride entering surface waters within the County from roadways treated with de-icing salts. | DNR, DTPW-ES | Compliance with WPDES NR216 Permit once issued. Conduct chloride study (per DNR approval). Obtain NR 216 stormwater permit or work through local communities to achieve similar objectives. | \$50,000 annually | \$200,000 annually |
| Work with the Southeast Wisconsin Beach Task Force (SWBTF) to identify and implement measures to prevent future beach closings resulting from bacterial contamination. | Assist researchers working to identify sources of bacterial pollution by providing access to pertinent information or research findings (i.e., findings from the storm sewer study). Continue current actions such as beach grading and grooming. Complete storm sewer evaluation at Bradford beach. Implement recommendations of storm sewer evaluation as agreed upon by Milwaukee County and WDNR. | WDNR, DTPW-ES, Parks, SWBTF | Continue to work with SWBTF to solve issues relating to beach closings and bacterial contamination. Compliance with WPDES NR216 permit. Completion of project recommended by storm sewer evaluation. | \$185,000 | \$1,400,000 capital costs |
| Implement recommendations relating to soil erosion and water quality in the Milwaukee County Parks Agricultural Lands Resource & Lease Value Analysis. | Re-instate the 75-foot buffer requirement along waterways on all leased land. Work with lessees and state agencies to install buffers and filter strips. Enroll farmed wetlands in CRP (or similar programs). | Parks, Lessees, DTPW-ES, NRCS, USDA | Re-instate the 75 foot buffer requirement. Install filter strips and/or buffers in five agricultural parcels. Enroll parcels used for marsh hay in CRP. | \$30,000 | \$100,000 |

Milwaukee County LWRMP, April 2006
* Activities will occur over the five-year implementation of the plan (2007-2011) unless otherwise noted.

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|--|---|--|---|---------------------------------------|-----------------------------|
| Continue to conduct and promote streambank stabilization projects, as well as projects employing Best Management Practices (such as vegetative buffers) to reduce erosion and improve water quality. Projects will be based on the Streambank Assessment Report. | Encourage the use of buffers or other BMPs in all stormwater or streambank-related projects. Work with stakeholders to seek funding and complete high priority projects listed in the Streambank Assessment Report. As projects are completed, work with stakeholders and project partners to increase public awareness about the causes leading to bank erosion and the efforts made to correct the problems through press releases, web pages, and/or educational displays. | DTPW-ES, Parks, DATCP, DNR, USACE, Milwaukee River Basin Partnership, UWEX, NRCS | Install ten buffers as part of stormwater or streambank-related projects. Complete three high priority projects listed in the Streambank Assessment Report by 2011. Issue three news releases associated with the projects. | \$30,000 annually | \$200,000 annually |
| Implement the recommendations outlined in the Pond and Lagoon Management Plan. | Conduct the three pilot studies recommended by the Pond and Lagoon Management Plan. Use the results of the studies to identify the techniques that are most successful and cost-effective, and in what situation they are most effective. Rank water bodies within the Park System based on water quality and potential for improvement. Post educational signs at the pilot study areas to inform Park visitors about the problems at the Lagoons and the methods for improving water quality. | DTPW-ES, Parks, DNR | Conduct the three pilot studies. Post an educational sign at each of the study sites. Rank the water bodies within the Park System. | \$70,000 | \$300,000 capital costs |

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| OBJECTIVES (Listed in order of ranked priority) | ACTIONS | WHO (Lead agency listed first) | PROGRESS TRACKING* | ESTIMATED COUNTY STAFF NEEDS | ESTIMATED OTHER COSTS |
|--|--|---|---|---------------------------------------|-----------------------------|
| Comply with the NR 151 Agricultural Performance Standards. | Continue to monitor agricultural fields and operations (including the Milwaukee Zoo) for compliance with the NR 151 standards and prohibitions. Develop a database for tracking the status and monitoring of agricultural operations. Notify owners of non-compliant operations/fields. Promote the use of BMPs and conservation initiatives through cost share programs and technical assistance to address problems and bring operations/fields into compliance. Complete transect survey to identify noncompliant farms. | Local gov't, DTPW-ES | Annually monitor agricultural fields and operations to ensure compliance of the standards and prohibitions in Milwaukee County. Develop a database for monitoring of fields/operations. Conduct a soil loss transect survey to determine "T" once every planning period. Identify Priority Farms/ Operations and notify noncompliant operators. Provide cost share and technical assistance to Priority Farm landowners to implement BMPs. Information may be provided via newsletters, brochures and other mailings as well as one-onone meetings. | \$20,000 annually | \$40,000 annually |

GOAL 2. Protect, Restore and Enhance Wetlands, Grasslands, Woodlands, Environmental Corridors, Quality Farmland, and Natural Areas, including those located within Milwaukee County-owned Parks and Open Spaces.

| OBJECTIVES (Listed in order of ranked priority) | ACTIONS | WHO (Lead agency listed first) | PROGRESS TRACKING* | ESTIMATED COUNTY STAFF NEEDS | ESTIMATED OTHER COSTS |
|--|--|---|---|---------------------------------------|---|
| Continue to pursue opportunities to protect, enhance and/or restore wetlands, grasslands, and woodlands and/or woody wildlife cover. Maintain woodlands, grasslands and prairies within the County using recognized management techniques. | Establish partnerships as applicable through Wetlands Reserve Program (WRP), watershed programs, Conservation Reserve Programs (CRP), and DNR/USFWS Wetland Restoration Initiative. Effectively utilize efforts by the Trails and Natural Areas Crew (TNAC) and volunteer groups to manage and maintain Parks lands. | Parks, DTPW-ES, NRCS, DATCP, DNR, USFWS, TNAC, Volunteer groups | Restart the native plant nursery. Bring invasive species levels to low maintenance level in five areas within the County Park System. Establish new and maintain existing public/private partnerships. | \$123,000 annually | \$130,000 annually capital costs |
| Increase public awareness of the value of wetlands, grasslands, and woodlands by promoting educational programs in Milwaukee County Parks and by encouraging volunteer groups to assist with the management of native habitats. | Encourage natural areas management by volunteer groups by organizing volunteer workdays at Milwaukee County Parks. Use these opportunities to educate volunteers and local citizens about the features and importance of natural habitats and their stressors through short presentations, educational materials and displays, and press releases. | Parks, Volunteers, DTPW-ES, DATCP, FSA | Encourage volunteer efforts by holding ten volunteer workdays in Milwaukee County Natural Areas per year. Issue a press release related to the workdays. Educate volunteers about why their efforts are important through short talks, handouts, etc. | \$5,000 annually | |
| Identify and acquire high quality natural areas, in accordance with the Milwaukee County Parks & Open Space Plan. | Work with local conservation groups (Milwaukee Area Land Conservancy, Green Seams) and municipalities to identify high-quality natural areas that should be protected. Work with stakeholders to develop a plan, follow-up with landowners, and administer county policy to secure natural areas from willing sellers. | Parks, DNR, MALC, Green Seams, Local municipalities | Work with stakeholders to create a high-priority acquisition list in the Parks & Open Space Plan. Work with stakeholders to acquire high priority parcels. | \$65,000 | \$9,000,000 (for all parcels listed in SEWRPC Parks and Open Spaces Plan) |

GOAL 3. Enhance Lake Michigan Bluff Protection Initiatives.

| OBJECTIVES (Listed in order of ranked priority) | ACTIONS | WHO (Lead agency listed first) | PROGRESS TRACKING* | ESTIMATED COUNTY STAFF NEEDS | ESTIMATED OTHER COSTS |
|---|--|--|--|---------------------------------------|---|
| Continue to improve and maintain Lake Michigan shoreline protection measures in Milwaukee County Parks, and abate shoreline erosion problems. | Toe protection; bluff slope re-grading, surface water runoff control, berms, groundwater drainage, bulkhead and groin system development; maintenance. | DTPW, Parks, WDNR, WCMP, City of MKE, ACOE | Conduct or partner on one bluff stabilization or shoreline protection project. | \$100,000 annually | \$5,174,000 capital costs \$536,000 annual maintenance costs |
| Maintain lakefront land for recreational use and access. | Enhance facilities to provide and improve access. | Parks, WDNR, WCMP, City of MKE | Seek partnerships on projects that improve lake access. | \$100,000 annually | \$2,930,000 capital costs \$195,000 annual maintenance costs |

Note: Additional funding and planning partners could include the Wisconsin Coastal Management Program (WCMP).

GOAL 4. Effectively Use and Maintain the Existing Information Management Network and Establish a Land Information Web Portal to Distribute Geographic Information.

| OBJECTIVES (Listed in order of ranked priority) | ACTIONS | WHO (Lead agency listed first) | PROGRESS TRACKING* | ESTIMATED COUNTY STAFF NEEDS | ESTIMATED OTHER COSTS |
|---|--|---|--|---------------------------------------|-----------------------------|
| Ensure that mapping and the GIS infrastructure are updated on a regular basis. | Enable a taskforce from various County Departments, assisted by GIS specialists, to create a priority list of data that needs updating and a timetable for updating infrastructure and data. Many of the existing data layers are layers similar to ones that local and state governmental units use. The taskforce should also coordinate and share data with these entities to ensure that efforts are not duplicated. | DTPW-ES, Parks, UWEX, SEWRPC, Local municipalities | Create a priority list for updating GIS data. Create a timetable for updating GIS data and infrastructure. | \$70,000 annually | |
| Promote the effective use of the GIS by County staff, natural resource professionals, developers, and citizens. | Continue to provide training for County staff, enabling them to effectively use the GIS. Participate in local workshops or conferences to educate the public about the GIS, once it is available on the internet. | DTPW-ES, Parks, UWEX, SEWRPC, Local municipalities | Conduct GIS training sessions for County staff. Present a talk relating to the County's GIS and available layers at two local workshops or conferences. | \$70,000 annually | |
| Distribute GIS data within County Departments and make available to the general public. | Create a Land Information Web portal that could make the data available via the internet. | DTPW-ES, Parks, UWEX, SEWRPC, Local municipalities | Make GIS data available to the public via the internet early in the planning period. | \$70,000 annually | \$85,000 capital costs |